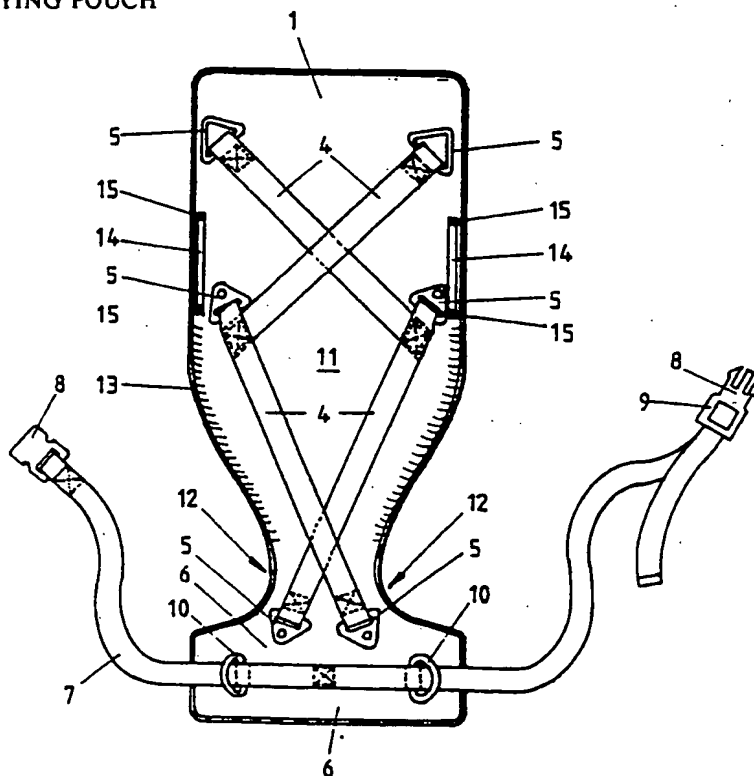




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(54) Title: INFANT CARRYING POUCH



(57) Abstract

An infant carrying pouch (1) substantially in an inverted T configuration which can be folded and strapped to provide a carrying pouch and which can also be used as a safety harness. Strap (7) secures the pouch during use, and a shoulder strap (20) enables the pouch to be worn.

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INFANT CARRYING POUCH

This invention relates to a carrier pouch in which an infant can be safely carried by its mother. More specifically, the invention is concerned with a pouch which is unusually versatile in that it can be worn by the mother in a number of different positions, it is capable of being folded away into a belt
5 pocket when not in use, and it can be strapped to the back of a supermarket shopping trolley of grid construction in order to hold the infant safely while the mother is shopping.

Many designs of infant carrying pouches are currently available serving
10 different purposes. One design comprises an appropriately shaped bag mounted within a light aluminium frame having straps enabling it to be worn comfortably on the mother's back. Another design of pouch avoids a frame and comprises a pocket having leg holes and in which the infant sits, the back of the pocket being extended upwards by means of a semi-stiff
15 plastics backing strip, to support the infant's back and provide a head rest. Straps are attached to the plastics backing strip and the carrier pouch is worn with the infant facing the mother and held laterally by portions of a harness attached to anchorages. The harness enables the mother to carry the weight of the infant from her shoulders with the infant trapped comfortably between
20 the backing strip and the front of the mother's body. Although such a construction of pouch can be stowed away fairly compactly when not in use, it is only capable of carrying an infant in one position.

One of the many day-to-day situations which a modern-day, busy mother has
25 to contend with is taking a lively infant with her while she is shopping. Most

shopping trolleys are of grid construction and have a grid partition hinged at its lower end and which can be moved forwardly from the back of the trolley in order to provide a small compartment having a seat in which an infant may be placed. Openings are provided in the back wall of the trolley and through
5 which the infant's legs pass when it is sitting on the seat. The infant then faces rearwardly towards the trolley handle.

Unfortunately, the seat provided in a shopping trolley is rather basic and does not give the infant any lateral support. A lively infant, finding the seat
10 uncomfortable, will quickly struggle sideways to free its legs from the leg openings in the back wall of the trolley. It will then try and stand on the trolley seat. The infant's mother is naturally aware of this and will normally keep a very watchful eye on the infant in a shopping trolley. However, she frequently finds that she has to interrupt her shopping in order to rearrange
15 the infant on the seat and to ensure that it never reaches a position where it can stand up and topple from the trolley.

An object of this invention is to provide an infant carrying pouch of improved versatility.

20

In accordance with the present invention, an infant-carrying pouch is made from a strip of soft padded material of generally inverted T-shape with the upper part of the stem portion of the T providing a backrest and head support behind the infant, and the head-portion of the T forming, with the lower part
25 of the stem portion, a pocket shaped to accommodate the bottom of the infant whose legs pass through openings respectively bounded by the two sides of the head portion of the T and the lower part of the stem portion; the upper part of

the stem portion of the T having on its face remote from the infant anchorages for attachment of a harness to enable the weight of the pouch to be carried from the mother's shoulders, and means being provided for releasably attaching the two ends of the head portion of the T to the lower part of the stem
5 portion of the T to maintain the shape of the pocket and to enable use of the pouch in a releasable manner as a safety harness.

Preferably said means comprise tie straps secured to opposite ends of the head portion of the T and terminating in fixtures which enable the ties to be
10 releasably fastened to one another behind the lower part of the stem portion of the T. With such an arrangement, it is important to ensure that movement of the ties up and down the lower part of the stem portion of the T is limited. This may be effected by providing restraining loops at the side of the lower part of the T and through which the ties pass. The restraining loops prevent
15 an infant seated in the pocket from forcing the ties downwardly around the seat portion of the pouch. Unless some device is provided for this purpose, there is a risk of the infant opening the pouch.

The said means for releasably attaching the two ends of the head portion of
20 the T to the lower part of the stem can comprise tie straps extending from opposite ends of the head portion of the T and terminating in fixtures which enable the ties to be releasably fastened to one another behind the lower part of the stem portion of the T.

25 The strip of material can be provided with restraining loops at the sides of the stem portion through which the tie straps can be passed.

The back of the strip is provided a plurality of sets of harness loops to which a shoulder harness can be secured.

Two sets of harness loops can be fixed to the upper part of the stem and one set
5 fixed to the head portion of the strip.

Reinforcing webbing in an X formation can extend between the sets of harness loops.

10 The shoulder harness can comprise two straps of substantially equal length interlinked in a X formation by a joint which enables one strap to slide relative to the other whilst maintaining unity, the ends of the straps each being provided with fasteners which enable them to be selectively fixed to the harness loops of strip depending on the mode of carrying which is adopted.

15

The front of the strip can be provided with a pocket which enables the strip to be rolled and stored in the pocket and by using the tie as a waist strap the pouch can be worn as a hip purse.

20 At least one end of the tie strips and one end of each shoulder strap can be adjustable for length.

The invention will now be described in more detail, by way of examples, with reference to the accompanying drawings, in which:-

25

Figure 1:

shows in back elevation an inverted T shaped strip shaped to be formed into an infant carrying pouch;

Figure 2: shows the strip of Figure 1 in front elevation;

Figure 3: shows a harness which can be detachably connected to the pouch to enable it to be carried safely and comfortably;

5

Figure 4, 5 and 6: shows the pouch in its closed condition and in use to enable the mother to carry the weight of the infant from her shoulders in any one of the three positions; and

10 Figure 7: shows diagrammatically a rear portion of a typical supermarket shopping trolley of grid construction and in which an infant is illustrated seated in the pouch which is tied to a hinged partition providing an infant-carrying compartment on the trolley; and

15

Figure 8: shows a detachable cape of bag-like constructions which can be worn over the combination of infant and carrying pouch to protect the infant from inclement weather conditions.

20

Figure 1 shows a strip 1 of thick quilted material of generally inverted T shape. The back of the strip is made of strong jean material and the front of the strip, shown in Figure 2, is of softer material and is formed with slightly cupped portion 3 to assist the formation of a pocket in which the infant is
25 seated when the pouch is in use.

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Two sets of crossed jean webbing 4 are stitched to the back surface of the strip 1 and terminate in plastic loops and fixtures 5 for attaching the harness shown in Figure 3.

- 5 The lower part of the strip 1 providing the head portion of the inverted T and referenced generally at 6, has a webbing tie 7 stitched to it and which ends in releasable fastening fixtures 8 used to secure the ends of the tie together. The tie passes through a buckle 9 of one of the fastening fixtures to enable its length to be varied. The intermediate portion of the tie passes through D loops
10 of plastics material which are held in position with the tie being stitched to the jean face of the strip 1.

The stem portion of the T-shaped strip 1 referenced 11 and the opposite edge portions of the junction between the head portion 6 of the T and the stem
15 portion 11 are protected by a soft edging material as shown at 13. Two restraining loops 14 are arranged at the lower part of the stem portion of the T and are stitched to the jean backing at their ends at 15.

As is apparent from Figure 2, the upper part of the stem portion of the T is
20 covered with a fabric strip 16 which is stitched beneath the edging 13 at the top and upper sides of the stem-portion of the T, and has its remaining side 17 elasticated so that it provides a pocket into which the lower part of the stem portion of the T and the head portion can be stowed when the carrier pouch is not in use. A separate belt, not shown, can be fastened to the fixtures 5 to
25 provide a belt enabling the carrier pouch to be carried around the waist of the mother when not in use.

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The harness used to carry the pouch on the mother's shoulders is shown in Figure 3. It comprises two thick webbing straps 20 which cross one another and are provided, at the point of crossing, with loop straps 21 which prevent the straps 20 from being uncrossed. The upper and lower ends of the straps 5 are provided with plastics fixtures 22 enabling them to be attached to the fixtures 5 shown in Figure 1. Self-adhesive patches of material known under the registered trade mark VELCRO can be used to hold the free ends of the harness in appropriate positions on the carrier pouch when the harness is fitted to it. Four such VELCRO patches are shown in Figure 3 and referenced 10 24.

Figures 4, 5 and 6 show different ways in which the carrier pouch can be supported on the shoulders of the mother with the infant is supported facing inwardly towards the front of its mother or outwardly. In some cases, such as 15 when walking long distances, it may be more comfortable for the mother to support at least some of the weight of the pouch from her hips. A belt 30, normally used to carry the pouch when in its stowed position as has previously been described, is then used around the mother's waist and its ends are secured to the D rings 10 provided on the head portion of the strip 1.

20

Figure 7 shows the carrier pouch in use to hold an infant in a compartment provided between a grid back wall 40 of a shopping trolley. A conventional partition 41 which is hinged at 42 to the lower end of the back wall 40 can be tilted forwardly to provide a seat 43 for the infant who then faces rearwardly in 25 the trolley and has its legs protruding through openings 44 provided in the rear wall of the trolley. The carrier pouch in which the infant is seated is placed on the seat 43 so that the infant's legs pass through the openings 44,

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and the web 7 is passed through the restraining loops 14 and around vertical bars in the grid partition 41 of the trolley. The fixtures 8 are then interconnected and the strap 7 tightened so that the infant is held in the carrier pouch, which, in turn, is securely held to the trolley. The webs 7
5 provide lateral support for the infant which is also provided with a back support by the upper part of the stem portion 11 of the pouch.

A cape shown in Figure 8 and made of warm, soft, quilted material provides a pocket 49 closed at its lower edge 48 and sides 47. A pair of zip fasteners 46
10 enable the upper part of the cape to be opened and the quilted portion 45 folded down to enable the carrier pouch to be inserted in the bag portion of the cape. The head of the infant is then contained within the hood-portion of the cape. When the cape is arranged around the infant and pouch, the cape is left unzipped to accommodate the harness. Tabs and VELCRO pads 52 enable the
15 cape to be held in position on the carrier pouch. The tabs 51 are secured by the VELCRO pads 52 to attachment points provided on the harness which is carrying the weight of the infant. Press studs may be used in place of the VELCRO pads 51.

CLAIMS:

1. An infant-carrying pouch is made from a strip of material (1) of generally inverted T-shape with the upper part of the stem portion (11) of the T providing a backrest and head support behind the infant, and the head-portion (6) of the T forming, with the lower part of the stem portion,
5 a pocket shaped to accommodate the bottom of the infant whose legs pass through openings respectively bounded by the two sides of the head portion of the T and the lower part of the stem portion; the upper part of the stem portion (11) of the T having on its face remote from the infant, anchorages (5) for attachment of a harness to enable the weight of the
10 pouch to be carried from the mother's shoulders, and means being provided for releasably attaching the two ends of the head portion of the T to the lower part of the stem portion of the T to maintain the shape of the pocket and to enable use of the pouch in a releasable manner as a safety harness.
15
2. An infant-carrying pouch as claimed in claim 1 wherein said means for releasably attaching the two ends of the head portion (6) of the T to the lower part of the stem (11) comprises tie straps (7) extending from opposite ends of the head portion of the T and terminating in fixtures (8)
20 which enable the ties to be releasably fastened to one another behind the lower part of the stem portion (11) of the T.
3. An infant-carrying pouch as claimed in claim 2, wherein the strip of material is provided with restraining loops (14) at the sides of the stem
25 portion (11) through which the tie straps (7) can be passed.

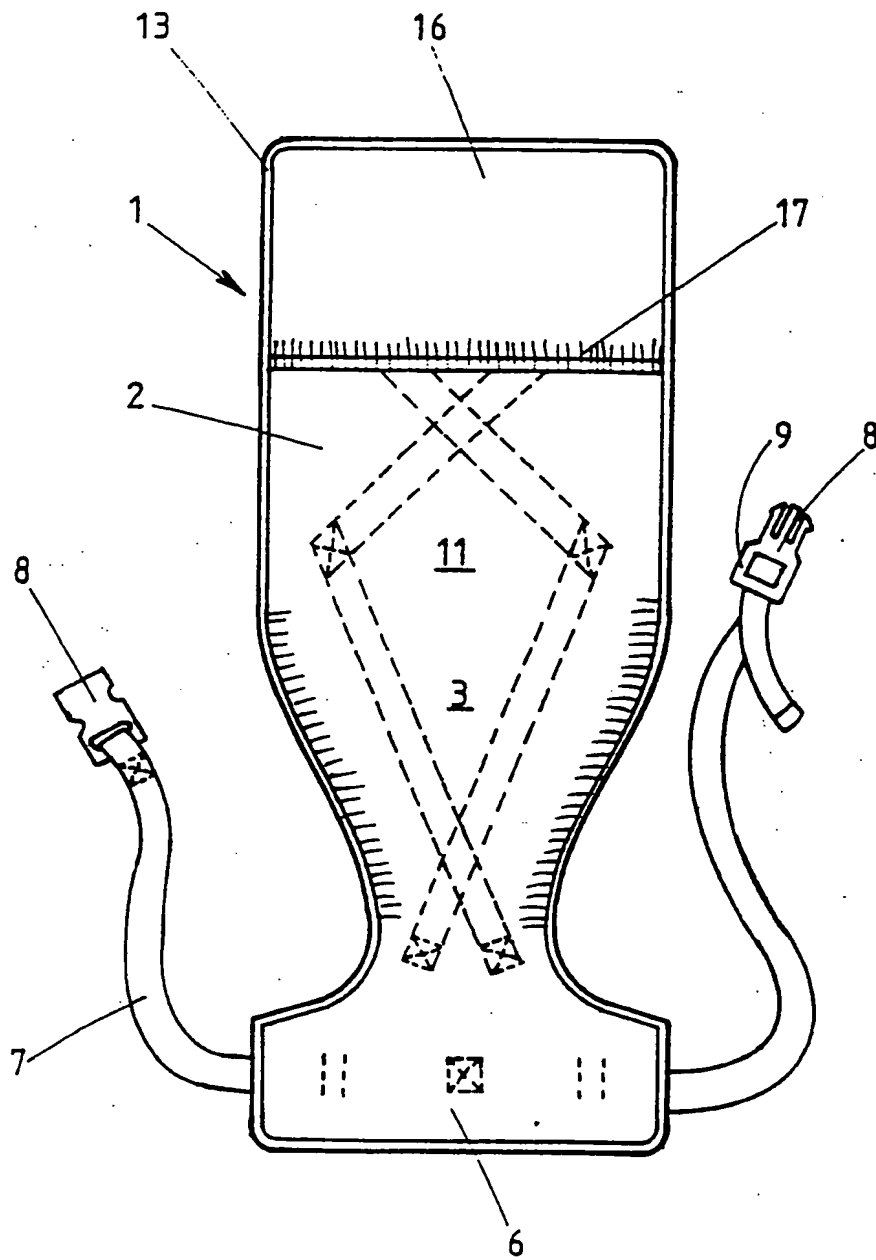
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4. An infant-carrying pouch as claimed in any one of claims 1 to 3 wherein the back of the strip (1) is provided a plurality of sets of harness loops (5) to which a shoulder harness can be secured.
- 5 5. An infant-carrying pouch as claimed in claim 4 wherein the two sets of harness loops (5) are fixed to the upper part of the stem (11) and one set is fixed to the head portion (6) of the strip (1).
6. An infant-carrying pouch as claimed in claim 4 or claim 5 wherein
10 reinforcing webbing (4) in an X formation extends between the sets of harness loops.
7. An infant-carrying pouch as claimed in any one of claims 1 to 6 wherein the shoulder harness comprises two straps (20) of substantially equal
15 length interlinked in a X formation by a joint which enables one strap to slide relative to the other whilst maintaining unity, the ends of the straps each being provided with fasteners (22) which enable them to be selectively fixed to the harness loops (5) of strip depending on the mode of carrying which is adopted.
- 20 8. An infant-carrying pouch as claimed in any one of claims 1 to 7 wherein the front of the strip is provided with a pocket (16) which enables the strip to be rolled and stored in the pocket and by using a waist strap the pouch can be worn as a hip purse.

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9. An infant-carrying pouch as claimed in any one of claims 1 to 8 wherein at least one end of the tie strips (7) and one end of each shoulder strap are adjustable for length.

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FIG. 2.

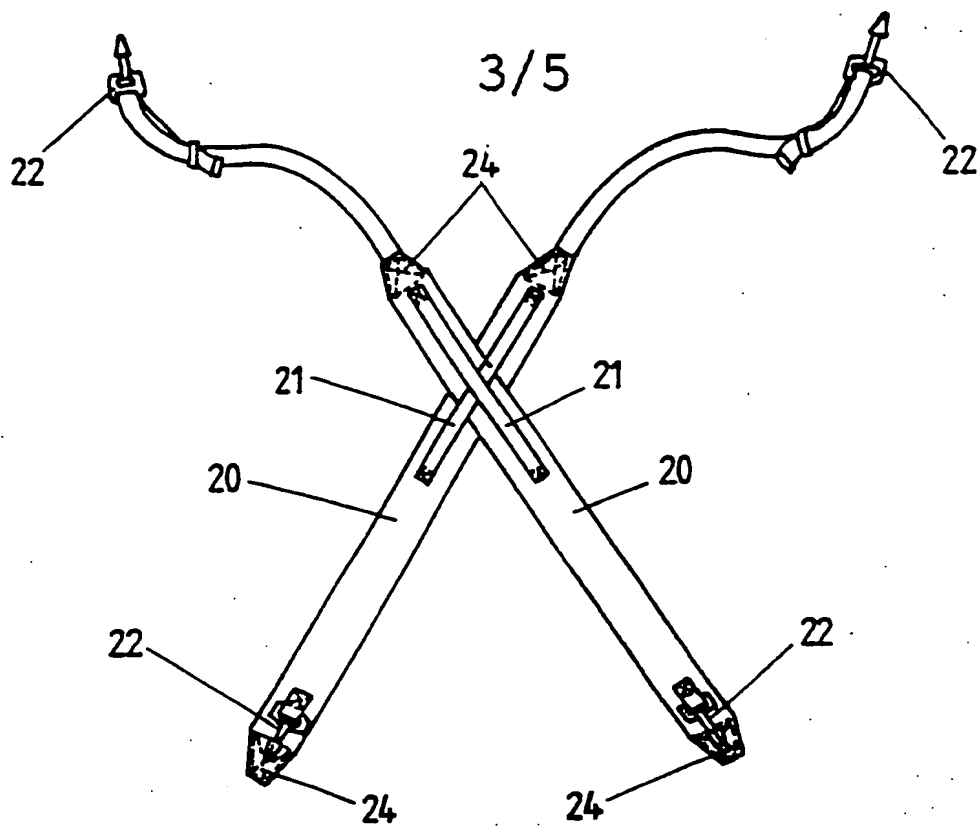


FIG. 3.

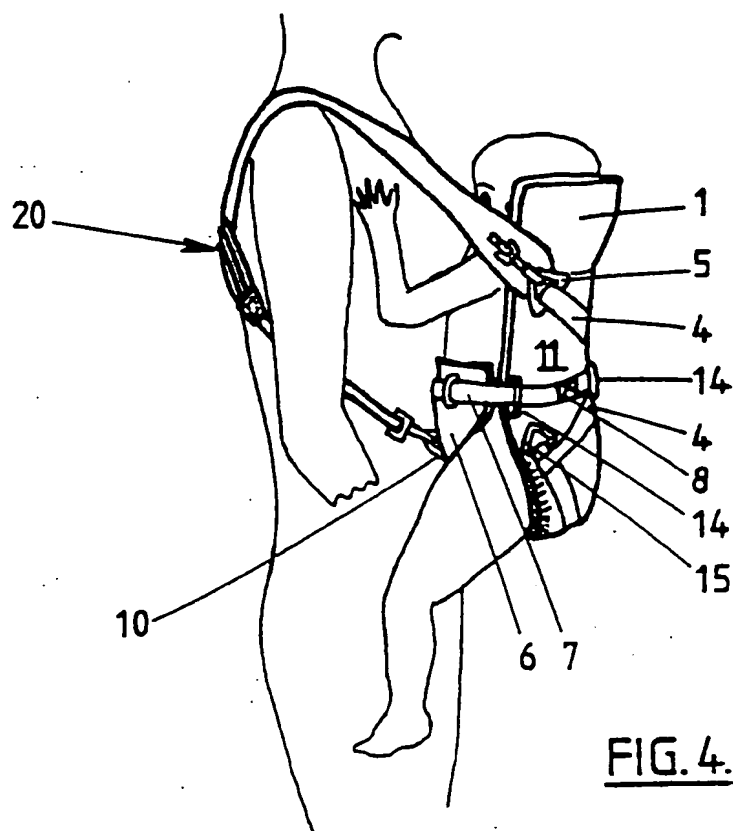


FIG. 4.

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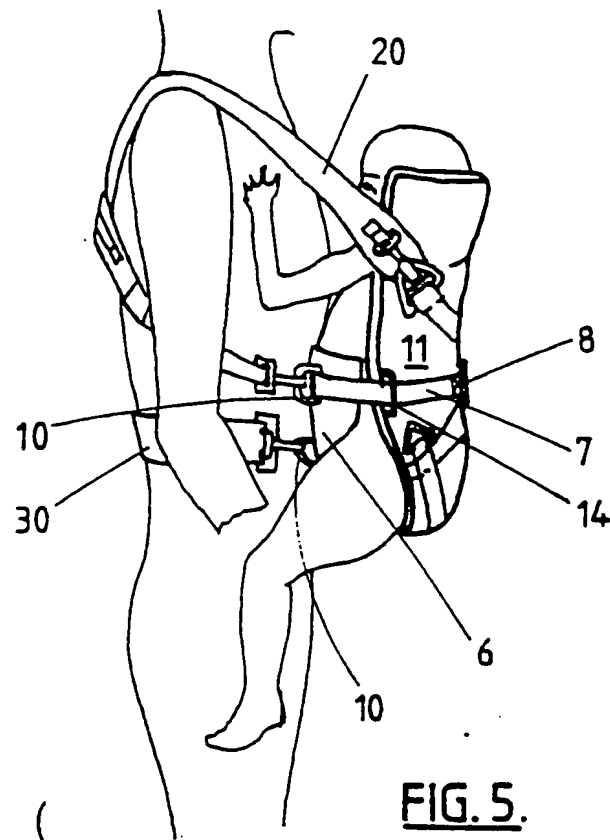


FIG. 5.

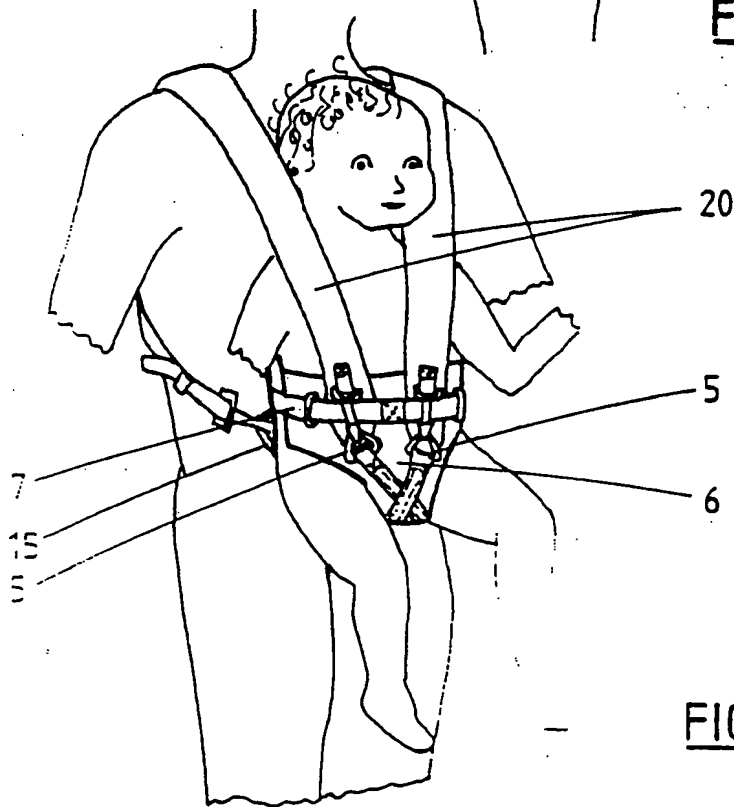


FIG. 6.

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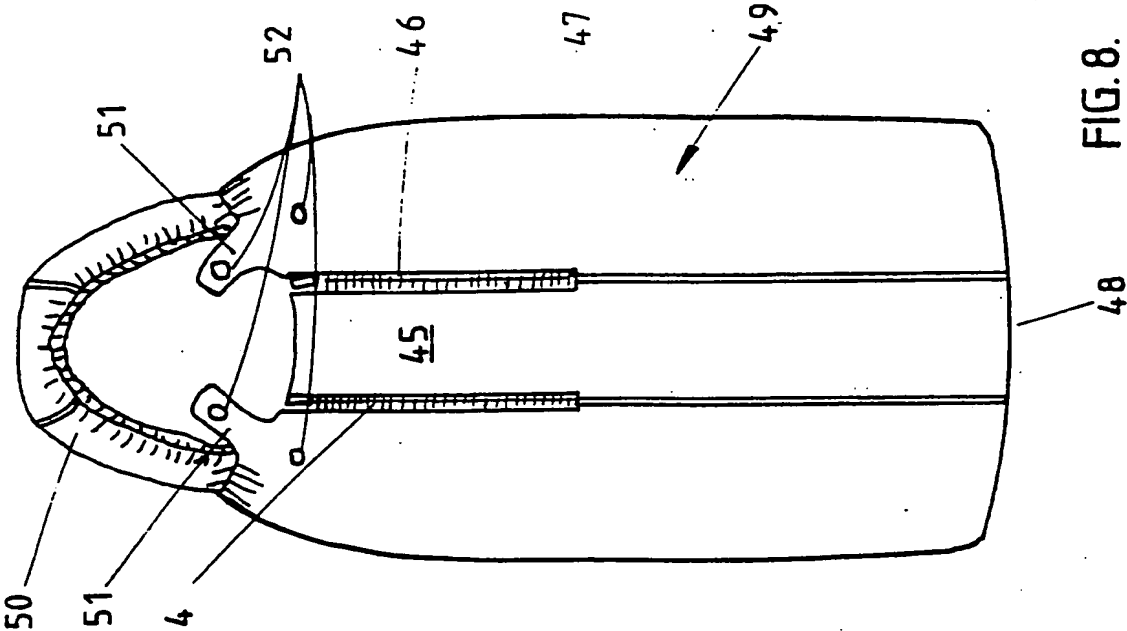


FIG. 8.

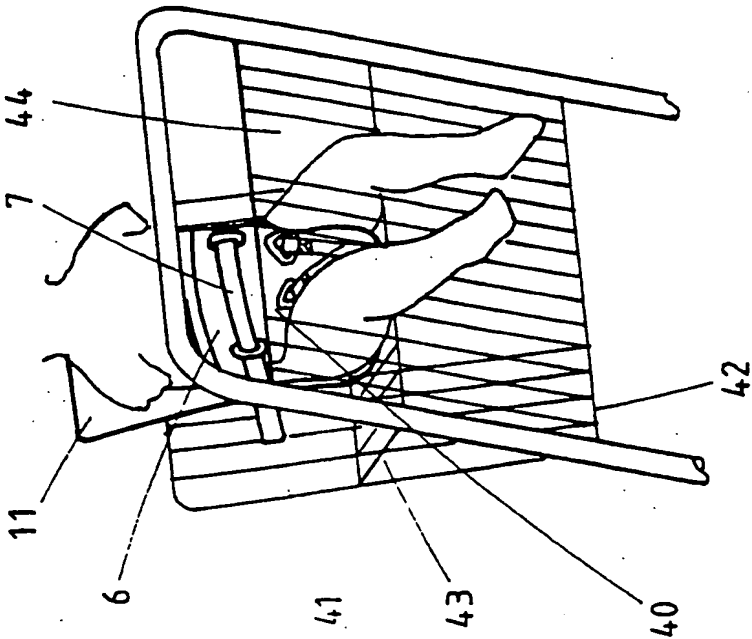
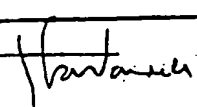


FIG. 7.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 92/00482

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC		
Int.Cl. 5 A47D13/02		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
Int.Cl. 5	A47D	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹		
Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	US,A,4 149 687 (NUNEMACHER) 17 April 1979 see column 4, line 13 - column 5, line 6; figures	1,2
A	---	3,4,6,7, 9
<p>¹⁰ Special categories of cited documents: ¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p>		
IV. CERTIFICATION		
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